

Dear Honda User,

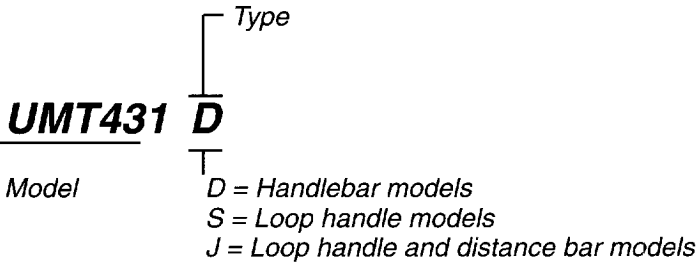
You have selected a Honda trimmer/brush cutter and we thank you for your confidence. This manual contains specific instructions for operating and maintaining your machine. We continually strive to share with our customers recent technological advancements, new equipment or materials as well as our experience. As a result, our product line is continuously being improved; that is why the characteristics and information provided in this manual are subject to change without notice.

If you should experience difficulties or if you have any questions regarding your machine, contact your dealer or authorized HONDA retailer.

We suggest that this manual remain with the product for ready reference and that it accompany the product in the event that it is resold. We recommend that you read the guarantee policy to fully understand your individual rights and responsibilities. The guarantee policy is a separate document provided by your dealer.

No part of this publication may be reproduced without prior written authorization.

EXPLANATION OF CODES USED IN THIS MANUAL



DEFINITIONS:

In this manual, hand-held loop handle models are designated by the general term “trimmer” and are referred to as type “S”.

The models equipped with a handlebar or a distance bar are designated by the general term “brush cutter” and are referred to as types “D” and “J”.

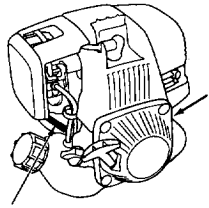
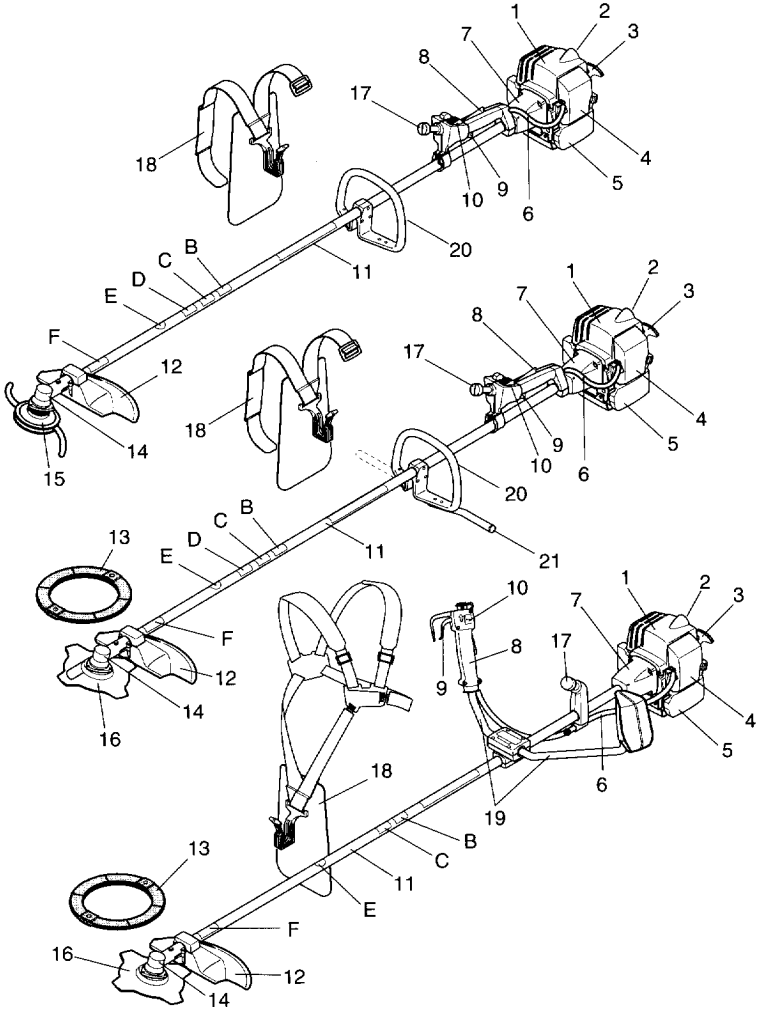
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GENERAL DESCRIPTION

1. IDENTIFICATION OF COMPONENTS



A
SERIAL NUMBER OF THE
MACHINE

ENGINE NUMBER

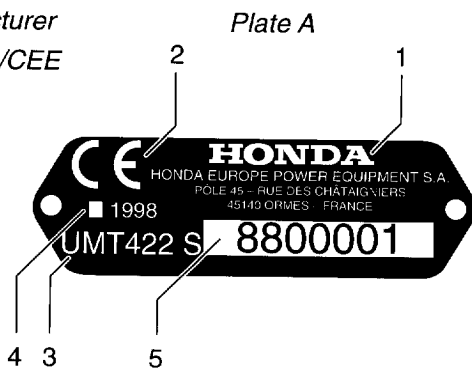
GENERAL DESCRIPTION

1. Engine
2. Spark plug
3. Recoil starter
4. Air filter
5. Fuel tank
6. Throttle cable
7. Clutch housing
8. Control grip
9. Throttle control trigger
10. Start/Stop switch
11. Transmission shaft
12. Blade guard
13. Transport guard
14. Transmission head
15. Nylon cutting head
16. Cutting disk
17. Harness attachment point
18. Harness
19. Handlebar
20. Loop handle
21. Distance-bar

- A. Identification plate
- B. Safety warning: Read Owner's Manual
- C. Safety warning: Projection Risks
- D. Safety warning: Authorized Cutting heads
- E. Safety warning: Protective Equipment
- F. Maximum transmission shaft rotation speed

2. MACHINE IDENTIFICATION

1. Name and address of the manufacturer
2. Conformity as per modified 89/392/CEE directive
3. Model and Type
4. Date of manufacture
5. Serial number



GENERAL DESCRIPTION





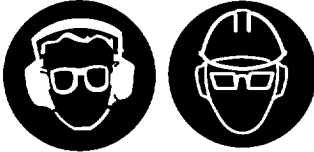

3. HAZARD LABELS

Your trimmer/brush cutter should be operated with caution. With this in mind, hazard labels in the form of pictograms have been placed on the machine to remind you of the main operating precautions. Their meaning is explained below.

These labels are considered an integral part of the equipment. Should any of them come off or become difficult to read, contact your dealer for replacement.

We also recommend you carefully read all of the safety instructions given in the following chapter of this manual.

4. EXPLANATION OF HAZARD SYMBOLS

- B.**  **WARNING:** Thoroughly read the owner's manual before operating the machine.
- C.**  **WARNING:** Projection risk. Keep all people and animals at a distance of at least 15 m when operating the machine.
- D.**  **LOOP HANDLE MODELS:**
(UMT422S)
The trimmer is to be operated with a nylon line cutting head only.
- D.**  [UMT431J]
Use the brush cutter with a nylon line type cutting head or plastic or metal blades.
Do not use circular saw blades.
- E.**  **Personal safety equipment is to be worn at all times. Safety eyewear (projectile risks) and noise protection such as earmuffs (risk of auditory damage) must be worn when operating the machine.**
- F.**  **Maximum transmission shaft rotation speed.**

SAFETY INSTRUCTIONS

All parts of the your trimmer/brush cutter are potentially hazardous if the machine is operated incorrectly or if a particular service operation is performed incorrectly or carelessly. Particular attention should be directed to the "Safety Alerts" preceded by the following words:

⚠ WARNING :

Hazards or unsafe practices which could result in severe personal injury or death.

CAUTION:

Hazards or unsafe practices which could result in minor personal injury or product or property damage.

NOTE: Indicates information or instructions that are necessary for proper operation and/or maintenance.



This sign reminds you to be particularly careful during certain operations. Refer to the safety instructions on the following pages, for the point(s) indicated in the box.

TRAINING

- A1. Carefully read all of the instructions given in this manual. Become familiar with correct machine operation and controls before operating the trimmer/brush cutter. Ensure that you know how to stop the engine quickly in case of an emergency.
- A2. Use the trimmer/brush cutter for its intended purpose, i.e.:
 - cutting grass using the nylon line attachment, along flower beds, landscaping, walls, fences, or small lawns, or for performing touch-up operations after mowing the lawn with a lawnmower.
 - for cutting tall weeds and brush with either metal or plastic blades or the 3-tooth blade, use type D and J brush cutters only.
 - use only brush cutters fitted with a handlebar (type D) and equipped with a circular saw blade for cutting shrubs measuring up to 6 cm in diameter.
 - Using the machine for other than its intended purpose is potentially dangerous or could lead to product damage.
- A3. Children or individuals unfamiliar with the machine's correct operation should not be allowed to operate the trimmer/brush cutter. Local regulations may stipulate operator age restrictions.
- A4. Never operate the trimmer/brush cutter:
 - When people, especially children, or pets are nearby. A safety perimeter of at least 15m should be respected between the machine and individuals in the vicinity. The trimmer/brush cutter is to be operated by one person only.
 - If you are under the influence of medication or substances which may affect your judgment or reactions.
 - With a blade guard that is not adapted to the cutting head currently being used. When using the nylon cutting head, ensure that the line cutter is in place to ensure correct line length.
 - If safety devices such as the tool guard are missing or damaged.

SAFETY INSTRUCTIONS

- A5. Your trimmer/brush cutter must not be altered in any way. Doing so could seriously compromise your safety and expose yourself and others to serious personal injury.
- A6. Keep in mind that the owner/operator is responsible for accidents or risks incurred by third parties and their property.

PREPARATION

- B1. Do not operate the trimmer/brush cutter whilst barefoot or when wearing sandals. Avoid loose-fitting clothing that may become snagged in the undergrowth.
Long trousers, safety boots or protective footwear with anti-skid soles, safety glasses or face shield, leather gloves and ear defenders are to be worn at all times while operating the trimmer/brush cutter.
A hard hat should be worn in all areas where falling objects may be encountered (branches, stones..).
- B2. Thoroughly inspect the area to be cleared and remove all objects which might be thrown up by the machine [stones, pieces of wood, wire, bones, etc...].
- B3. **WARNING: DANGER! Gasoline is highly inflammable.**
 - Store fuel in specially designed fuel storage containers.
 - Perform refueling operations outdoors only, with the engine off, and do not smoke while refueling or when handling the gasoline container.
 - Never remove the fuel tank cap or refuel while the engine is running or while it is still hot.
 - Do not attempt to start the engine in the presence of spilled gasoline: move the trimmer/brush cutter away from the area and avoid creating a source of ignition until the gasoline has evaporated and vapors have dissipated.
 - Replace fuel caps securely on both the fuel tank and container.
- B4. Replace faulty mufflers.
- B5. Before each operation, perform a general inspection and thoroughly check all attachments, blades, protective guards for wear and that all bolts are properly tightened. Make sure that the throttle control trigger and STOP button operate correctly.
- B6. Check that the handles and harness fastening point are positioned correctly and that the machine is properly balanced. For correct positioning and adjustments, refer to the chapter entitled "Preliminary preparation and checks " of this manual.
- B7. Set the idle speed so that the cutting head comes to a complete stop when the throttle control is released.
- B8. Install the blade cover over the blade cutter during removal and installation.
 - Turn the engine switch to the STOP position and remove the spark plug cap.
 - Wear the gloves during operation.

OPERATION

- C1. Do not operate the engine in a confined space where dangerous carbon monoxide fumes can accumulate.
- C2. Work by daylight only.
- C3. Whenever possible, avoid using the trimmer/brush cutter on wet ground.
- C4. While operating the machine, maintain the safety distance with the blade, as determined by the location of the harness attachment point.
- C5. Walk, never run or put yourself in a situation of instability. Watch out for obstacles such as stones, tree stumps, etc that may cause you to stumble.
- C6. Ensure that you have proper footing when working on sloped terrain. Slopes should be worked laterally; never work straight up or down a slope.
- C7. Do not operate the trimmer/brush cutter on excessively steep slopes. It is the operator's responsibility to assess the potential risks of a particular terrain and to take all of the necessary precautions to ensure his/her safety. This is especially important when operating on slopes, uneven, slippery or loose ground.
- C8. Never change the engine settings so that it operates at excessive speeds.

SAFETY INSTRUCTIONS

- C9. Before starting the engine, ensure that no one is within 15 m of the machine, that the cutting head is not touching the ground and that the machine is in a stable position.
- C10. Start the engine with caution, with respect to the operating instructions and stay clear of the cutting head.
- C11. Stop the engine and disconnect the spark plug wire in the following cases:
 - Before any intervention or servicing of the cutting system.
 - Before cleaning, checking, adjusting or servicing the trimmer/brush cutter.
Only carburetor and idle speed adjustments are carried out while engine is running.
During this operation, make sure that the cutting head will not strike any object and that the machine is in a stable position.
 - After striking a foreign object. Inspect the cutting system and transmission shaft for damage. Make all necessary repairs before resuming operation.
 - If the trimmer/brush cutter starts to vibrate abnormally.
Immediately search for the cause of the vibrations and make the necessary repairs.
- C12. Stop the engine in the following cases:
 - Whenever the trimmer/brush cutter is left unattended.
 - Before refueling operations.
 - When moving to different work zones.

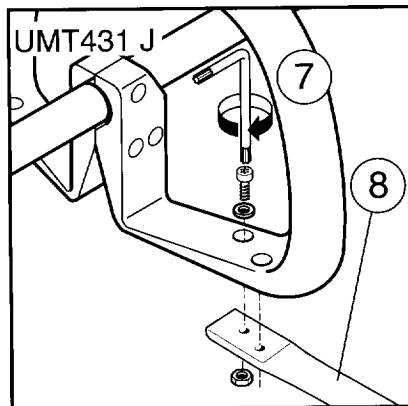
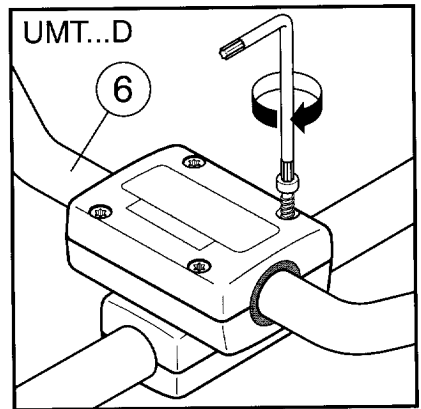
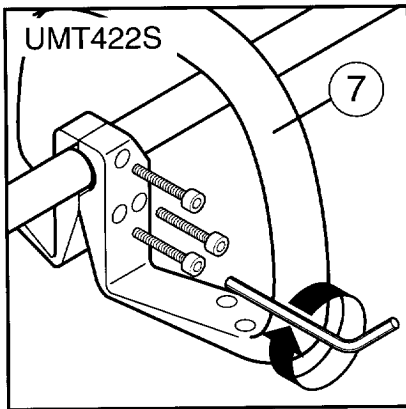
MAINTENANCE AND STORAGE

- D1. Keep all nuts and bolts securely tightened to ensure safe operating conditions. Regular maintenance is essential for operator safety and to ensure optimum performance.
- D2. Do not use the machine if parts are worn or damaged. Parts are to be replaced, not repaired. Use genuine Honda parts only. Blades must always bear the manufacturer's name as well as the reference of the maximum speed of rotation, and, the direction of rotation in case of circular saw blades. Parts of inferior quality may damage the machine and compromise safety.
- D3. Wear heavy gloves when disassembling and reassembling the cutting device.
- D4. Never store your trimmer/brush cutter in a room where the gasoline vapors from the tank could be ignited by a flame, spark or an intense source of heat.
- D5. Store in a clean, dry room, out of the reach of children.
- D6. Let the engine cool down before placing the machine in storage.
- D7. To reduce fire hazards, remove all leaves, grass cuttings and excess oil from the trimmer/brush cutter, particularly from its cooling ribs, muffler as well as from the fuel storage area.
- D8. To avoid accidental injury, always install the protective cover on the cutting blade when storing or carrying the machine.
- D9. If the fuel tank must be drained, conduct the operation outdoors with the engine cold.
- D10. Please respect the environment and do not dispose of your old engine oil or gasoline by simply pouring it down the drain, into the gutter or by spilling it on the ground. Local service stations can have oil and gasoline safely recycled.

1. LOOP HANDLE AND HANDLEBAR

The loop handle [7] and the distance bar [8] are assembled as shown below. The trimmers/brush cutters are delivered already assembled. Only the handlebar [6] and loop handle [7] or [8] need to be installed on the transmission tube as shown in the illustrations below.

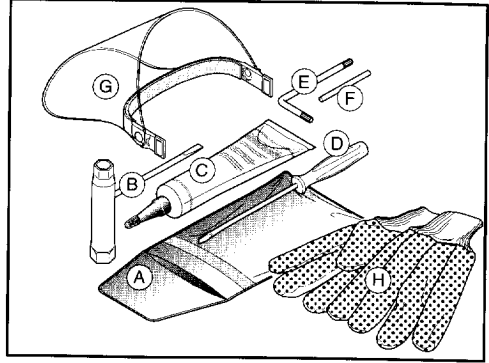
Type S and J brush cutters can be used on the right or left-hand side, according to whether the operator is right-handed or left-handed. The distance bar [8] of the type J model can be fitted on either the right-hand or the left-hand side, to accommodate both right-handed or left-handed operators.



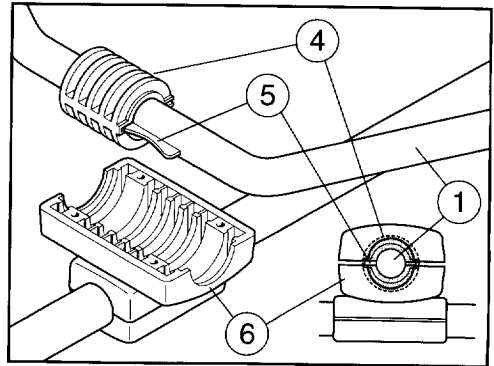
ASSEMBLY

The assembly is to be done with the tools provided with your machine. The tool bag contains the following:

- [A] Tool kit
- [B] Spark plug/cutting head wrench
- [C] Transmission head grease (type D only)
- [D] Standard tip screwdriver
- [E] Torx L-wrench
- [F] Cutting head lock pin
- [G] Face shield
- [H] Gloves



When installing the handlebar [1], be sure that it is properly positioned in relation to the rubber shock absorber [4]: slide the plate [5] welded onto the handlebar into the shock absorber's notch. Then, place the assembly in the handle mount by lining up the plate [5] with the bearing surface [6] as shown in the drawing.



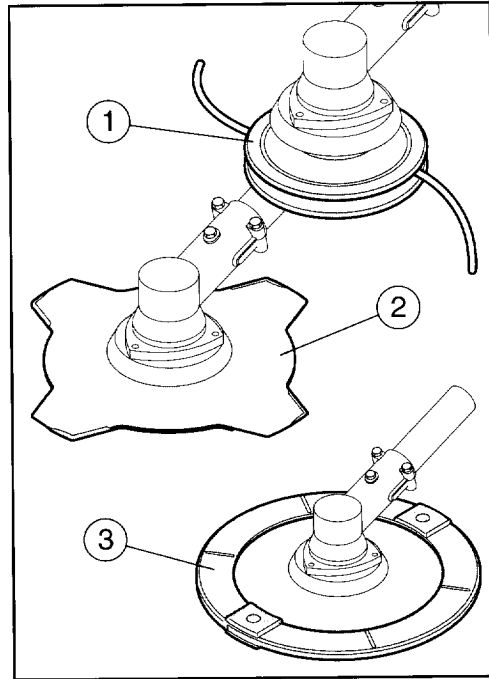
2. CUTTING HEADS

The UMT422S model comes equipped with a nylon cutting head [1].

Type J models also include a four-tooth metal blade [2], and protective cover [3].

Type D models come equipped with a four-tooth metal blade [2] and protective cover [3].

The nylon cutting head [1] is included separately in the packaging.



3. BLADE GUARDS

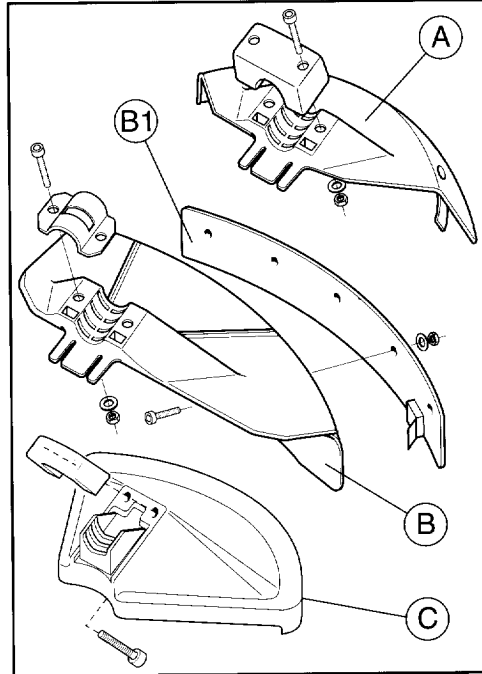


A4	B8	C11
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The UMT422S trimmers come with a type [A] guard installed and is intended to be used with the nylon cutting head only.

The other types come with a type [B] guard installed for use with the trimmer blades, and a guard extension [B1] which is to be secured to the guard [B] when the nylon cutting head is used.

Type D [dual handle] brush cutters also include a type [C] guard for use with a circular saw blade (available separately).



ASSEMBLY

4. CUTTING SYSTEM ASSEMBLY

a) GUARD [A]

(S models only):

Install guard [A] onto the transmission head using bolts [1] and the supplied Torx wrench.

Ensure that the line cutter is correctly positioned.

b) NYLON CUTTING HEAD

(all models)

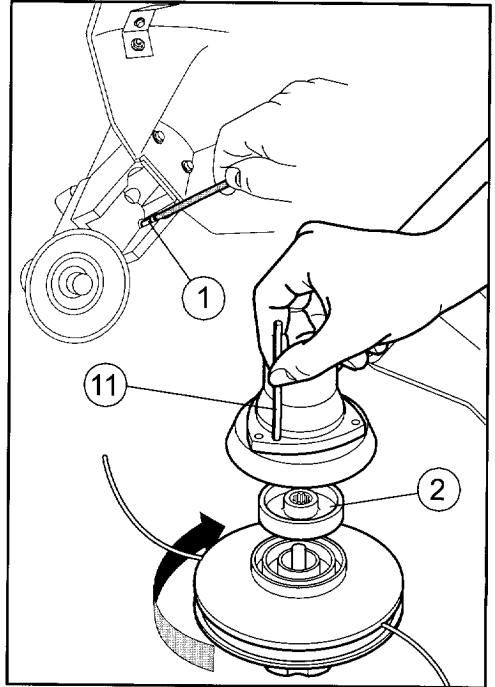
With the spacer [2] already installed on the transmission shaft, screw down the Nylon head. Tighten counterclockwise. Use the supplied locking pin [11] and wrench for correct tightening.

c) GUARDS [B] and [B1]

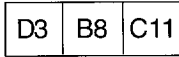
(supplied only with type D and J models)

Install part [B] of the trimmer blade guard onto the transmission head with bolts [3] and tighten securely with the Torx wrench.

If using the Nylon cutting head, install guard [B1] onto guard [B] using 5 bolts [4]. Ensure that the bottom of the guard [B1] is on the same level as the Nylon line. Install the line cutter [5] on the guard [B1].

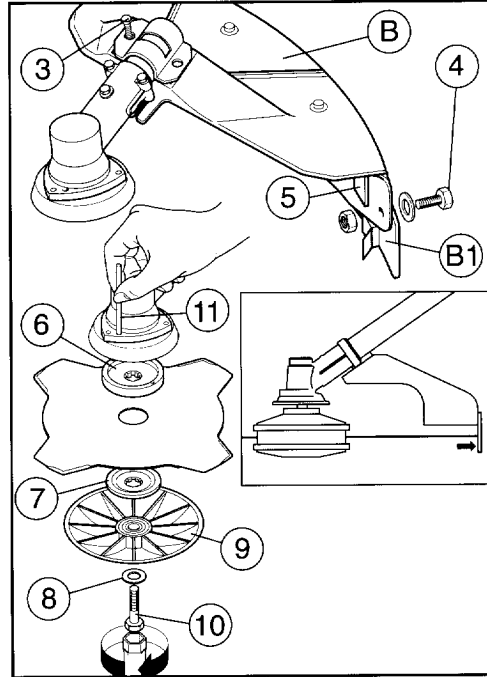


d) FOUR-TOOTH BLADE
(Supplied with type D and J models only)



Place the cutting disk between spacers [6] and [7] so that the grooves fit perfectly onto the shaft.

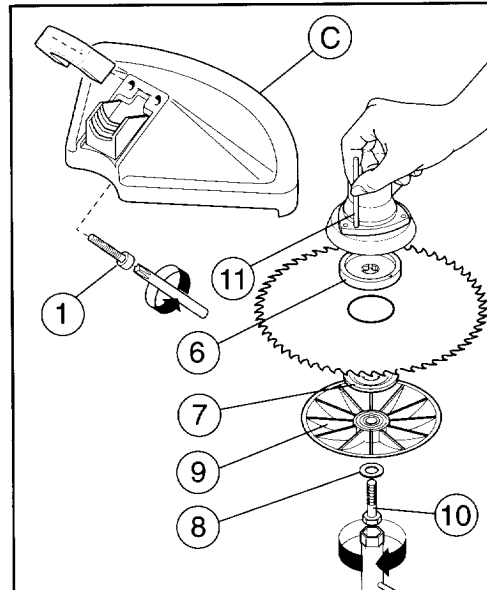
Install washer [8] and stabilizer [9], then block axle rotation with lock pin [11] and tighten securely bolt [10] counterclockwise with the supplied wrench.



e) CIRCULAR SAW BLADE GUARD
(Supplied with type D models only)

The circular saw blade (available separately) is installed in the same manner as the trimmer blade.

Install guard [C] with mounting bolts [1] onto the transmission head as shown. Tighten securely with supplied Torx wrench.



ASSEMBLY

5. HARNESS ASSEMBLY AND ADJUSTMENT

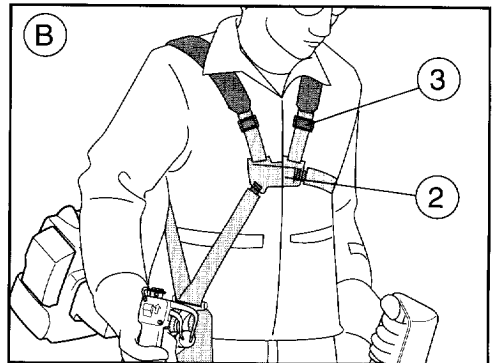
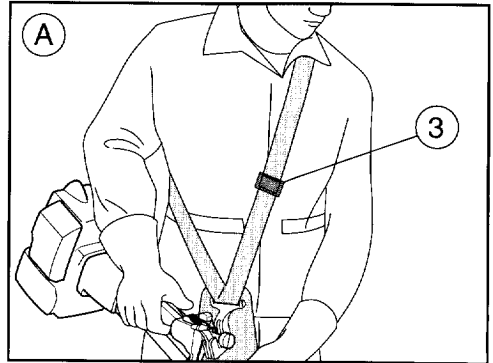
⚠ WARNING :

For both safety and operator comfort, the harness must be properly adjusted so that it fits you comfortably and so that the machine is correctly balanced in working position.

Type S and J machines come with a single sling harness to be slung over the shoulder [A].

Type D machines come with a vest style harness that is worn over both shoulders and adjusted by means of a belt [B].

Put the harness on and attach the straps with the quick release buckle [2]. Next, adjust strap length with the adjuster buckles so that the machine is suspended at hip height, as shown in figures [A] and [B].



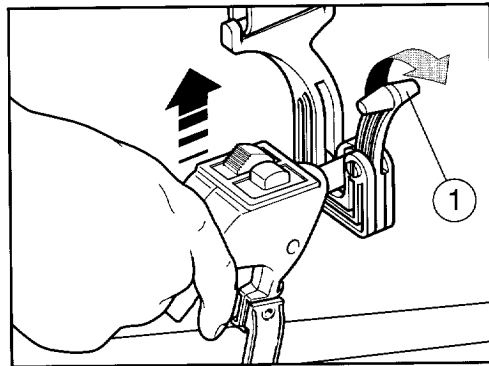
PRELIMINARY PREPARATION AND CHECKS

1. BALANCING

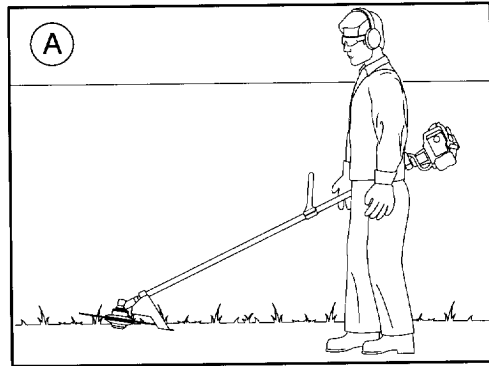
Both harness types are equipped with a quick release connector enabling the operator to rapidly free himself/herself from the machine in case of an emergency.

Attach the trimmer/brush cutter as shown. The machine is unhooked by fully opening the lock lever [1] and by lifting the machine out of the hook.

Once the machine is in place, it is essential that it be properly balanced. This check must be done with the cutting head installed and with the fuel tank half full [A].



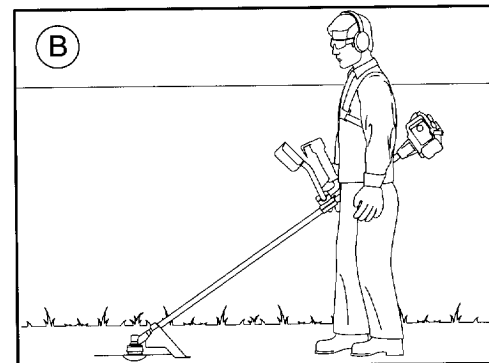
When the machine is fitted with a cutting disk, the stabilizer (p.15 - [9]) must also be installed. Correct balance is obtained when the stabilizer barely touches the ground [B]. Only a very slight effort should be required to raise the tool off the ground.



If the cutting head is too "heavy" move the fastening point [1] forward, or backward in the opposite case:

loosen the bolts [2] with the supplied Torx wrench in order to move the control grip [3] or support [4] to the desired position.

CAUTION: Be careful not to overly stretch the throttle cable when the moving the handles. Check that throttle control trigger operates correctly.

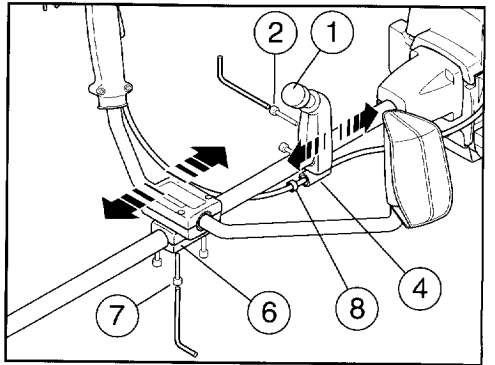
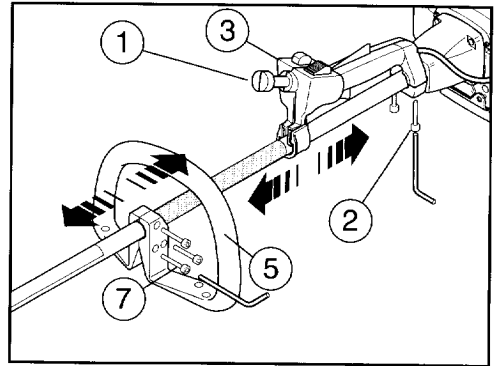


PRELIMINARY PREPARATION AND CHECKS

Tighten the bolts [2] slightly, then adjust the loop handle [5] or the handlebar [6] by loosening the 4 mounting bolts [7] to obtain a comfortable operating position.

⚠ WARNING :

On type D brush cutters, the support [4] must never be placed beyond the collar [8] located on the cable sheath. Doing so would cause the machine to be unbalanced, and render the safety distance between the operator and cutting head insufficient.



Once you have found the correct position, check the balance again and readjust, as required.

Then securely tighten bolts [2] and [7] to lock the handles into position.

2. FILLING THE FUEL TANK

⚠ WARNING :



B3

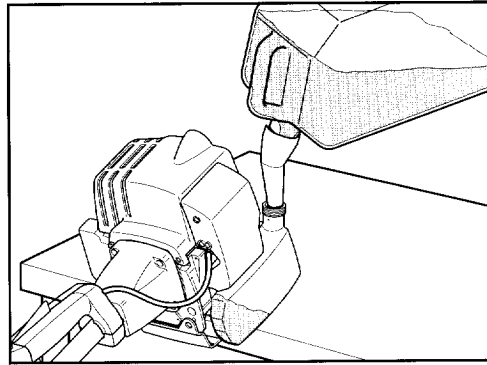
The ambient temperature may cause the pressure inside fuel containers to increase. The cap should be removed with caution to avoid possible splashing of fuel. Fuel should be stored in a cool area, for short periods of time and should never placed in direct sunlight.

Tank capacity	(liters)
UMT422S, UMT422D	0,45
UMT431J, UMT431D	0,65
Recommended fuel: Premium or Premium unleaded	

PRELIMINARY PREPARATION AND CHECKS

CAUTION:

- Clean the fuel tank cap and around its edges to prevent foreign bodies from entering the fuel tank.
- To prevent accidental spillage, fill the fuel tank with an appropriate funnel or from a jerry-can fitted with a suitable spout.
- For easy filling, place the machine in its operating position as shown here.
- Ensure that the machine remains stable throughout this operation and that it does not fall over.



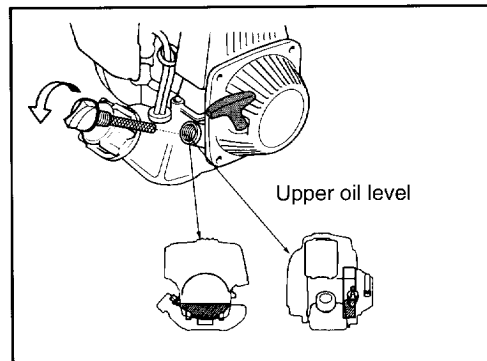
▲ WARNING :

- Fuel is extremely inflammable and, under some circumstances, explosive.
- Fill the tank in a well ventilated area with the engine off. Do not smoke, produce flames or sparks in the area where the tank is filled and where the fuel is stored.
- Do not overfill the tank (fuel should not rise into the filler neck). Ensure that the gas cap is correctly replaced and tightened after the filling the tank.
- Be careful not to spill fuel during the refueling operation. Spilled fuel or vapors can catch on fire. In case of spilled fuel, make sure that the area has dried and that fuel vapors have dissipated.
- Extended contact of fuel with the skin and exposure to fumes should be avoided.
- KEEP FUEL OUT OF THE REACH OF CHILDREN.

3. FILLING THE OIL RESERVOIR

▲ WARNING :

Operating the engine with insufficient oil can cause serious engine damage. Check the oil level on a flat horizontal surface with the engine off. Using of a non-detergent oil or 2-stroke engine oil could considerably shorten engine life.



PRELIMINARY PREPARATION AND CHECKS

CHECKING THE OIL LEVEL

- 1) Place the engine in a horizontal position, on a smooth surface.
- 2) Remove the cap and check the oil level; oil should be level with the top of the reservoir neck.
- 3) If the level is low, top it off up with the recommended oil to the top of the neck.

Use Honda 4-stroke oil or quality equivalent, highly detergent, which meets USA automobile manufacturer SG, SF classification standards. Motor oil classified SG or SF bear this indication on the container. SAE 10W 30 oil is recommended for multi-temperature, general purpose usage.

Oil reservoir capacity: 100 cm³



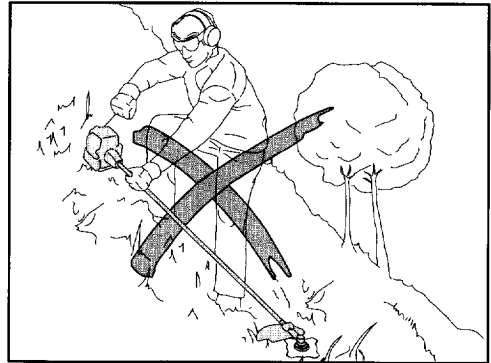
A4	B1	B2	B5
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⚠ WARNING :

C1	C7	C9	C10
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Always rest the machine on the ground to start it up. Make sure that it is stable and that the tool is not touching other objects or the ground.



4. BEFORE STARTING UP

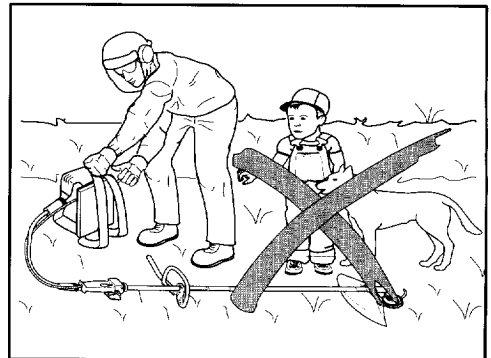
Check that the guards are properly fitted and securely tightened, that the transport protection has been removed and that you have the necessary protective equipment, such as safety goggles, helmet and ear defenders.

Ensure that the cutting head and handle grips are well tightened.

Move the equipment away from where the fuel tank has been filled.

Stand on flat and stable ground.

Check that the spark plug cap is in place.




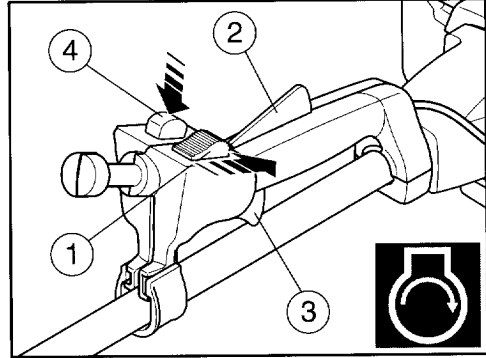
STARTING AND STOPPING THE ENGINE

1. COLD START

The machine is considered "cold" if engine has not been running for more than 5 minutes in the last 10 minutes.

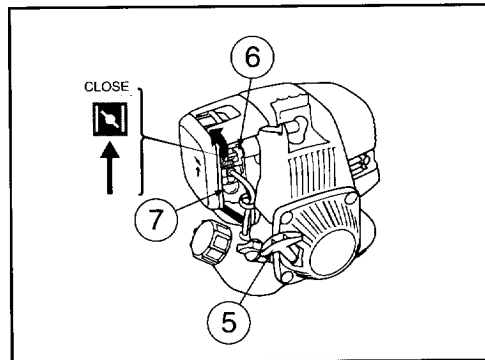
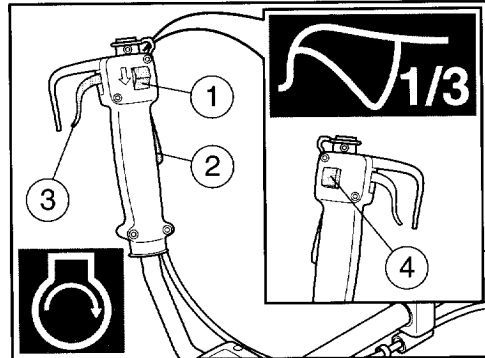
Start the engine as follows:

- Place the Start/Stop button [1] in the START position. 
- Place the choke [6] in the CLOSE position.
- Press the primer button located below the carburetor several times to prime the engine.
- Gently pull the starter cord [5] until resistance is felt.
- Then, pull strongly until the engine starts.
- Once the engine has started, return the choke [6] to the position opposite CLOSE.



If the engine fails to start:

- Press the safety lever [2] all the way down and pull and maintain the throttle control trigger [3].
- Engage the trigger lock button [4] and, while holding it down, release the trigger [3]. This locks the throttle in 1/3 position. The throttle can be returned to the idle position by simply squeezing the trigger [3] once again. Try to start the engine by pulling the starter cord once again. Once the engine has started, return the choke [6] to the position opposite CLOSE.



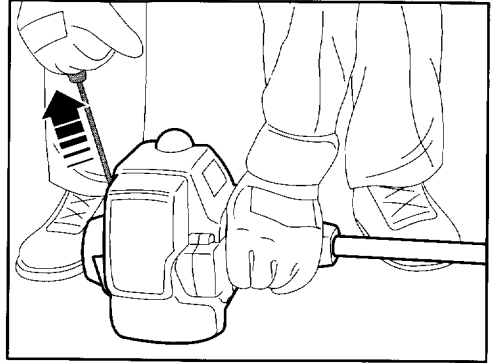
STARTING AND STOPPING THE ENGINE

CAUTION:

Do not pull the starter cord all the way out. Do not release the recoil starter grip suddenly. Return it slowly to avoid damaging the mechanism.

NOTE:

Always pull the starter cord rapidly. A slow pull may not be sufficient to produce the sparks necessary to start the engine. Do not place your foot or knee on the transmission tube to stabilize the machine. Doing so may bend the tube rendering the machine inoperable.




⚠ WARNING :

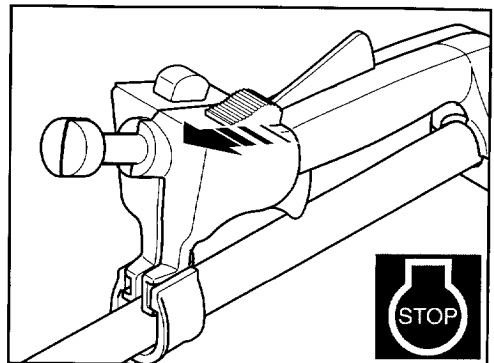
When the engine starts, the cutting head will begin to rotate immediately. Return the machine to idle by squeezing and releasing the throttle control trigger.

2. HOT START

The machine is considered "hot" if the engine has been running for more than five minutes in the last 10 minutes. The procedure for hot starting is the same as that for cold starting except that you do not have to place the choke [6] in the CLOSE position.

3. STOPPING THE ENGINE

To stop the engine, slide the Start/Stop button into the STOP position  . This also enables the engine to be stopped in case of an emergency.



1. OPERATING POSITION

Once the machine has been started, attach it to the harness as described in the chapter concerning preparation.

⚠ WARNING :

While handling the machine, avoid striking objects with the cutting head and keep the tool away from your body. Do not use the machine if it is not attached to the harness.

Hold the trimmer/brush cutter firmly by both grips as shown.

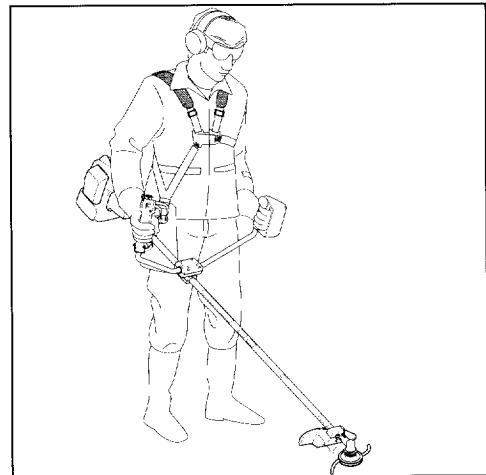
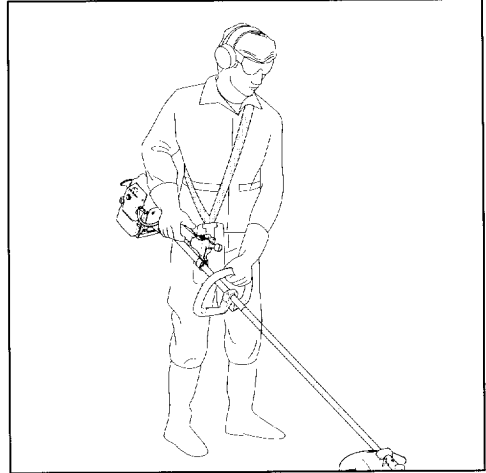


Carefully read the safety instructions

CAUTION: While operating your machine, always let the engine return to idle between operations. Serious engine damage may result if the engine is allowed to run for long periods of time at maximum speed under no load (no resistance due to vegetation on cutting head).

2. WITH A NYLON LINE CUTTING HEAD

This cutting head is intended to complete the job done with a lawnmower. It is particularly handy and efficient for cutting grass along walls or fences, around trees or stakes and narrow or uneven surfaces that are inaccessible by the lawnmower.



OPERATION

Line length adjustment:

Loosen the knob [1] located underneath the cutting head about three turns clockwise [2], while holding the head's lower housing [3] (Fig. 1).

Extract new line by pulling both ends to the desired length, but do not exceed 120 mm (use the length marks indicated on the upper housing as a reference).

Tighten the knob [1] securely by turning it counterclockwise.

If too much line has been extracted, the excess can be rewound by holding the head's upper housing [4] and, with the knob [1] loosened, turning the lower housing [3] clockwise.

An automatic feed head is available separately.

Line replacement:

When all of the line inside the reel has been used, it is possible to replace it. Contact your authorized HONDA dealer to obtain the appropriate nylon line.

Remove the knob [1] by turning it clockwise (Fig. 2).

Separate the two housings. Care should be taken not to loose the washer [4] or spring [5]. Remove the spool [6] and carefully observe how it is assembled.

Remove the nylon line that remains on the spool. Remove the two brass guides from the upper housing.

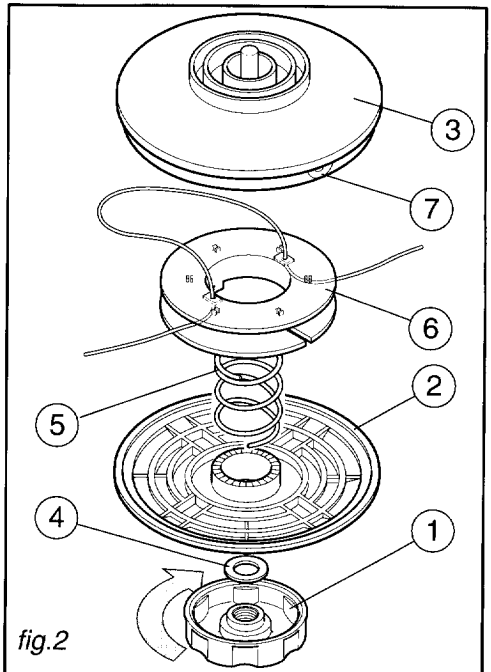
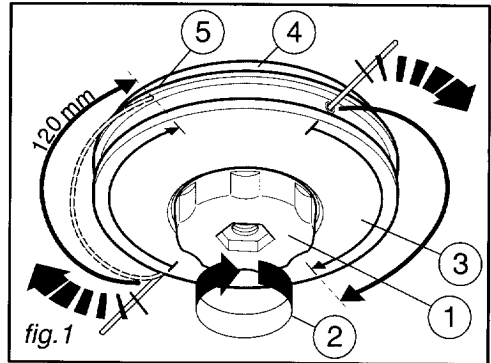
Prepare a length of new \varnothing 2.4 mm line, 6 meters in length maximum (5 meters if the \varnothing is 3 mm.) and fold it in half to obtain two strands of equal length.



▲ WARNING :

B8 C11

Make sure that the line length adjustment blade is properly fixed to the tool protection.



CAUTION: Always use the diameter of line recommended in the technical specifications. Using a line of smaller diameter will give poor results and could result in premature wear of the machine.

A line of too large diameter will impair engine performance by creating an excessive load strain, thus producing poor results.

▲ WARNING :

Never replace the nylon line with a line of a different material, such as wire.

Run both ends of the line through the two holes of the spool's upper flange [8] and into spool's groove.

Replace the spool, making sure that the line [9] is correctly positioned in the clips [10].

The ends of the line should exit the notches [11].

Thread a brass guide [7] onto each end of the line and engage them in the notch. Be careful that they are properly installed: small portion facing the inside of the upper housing.

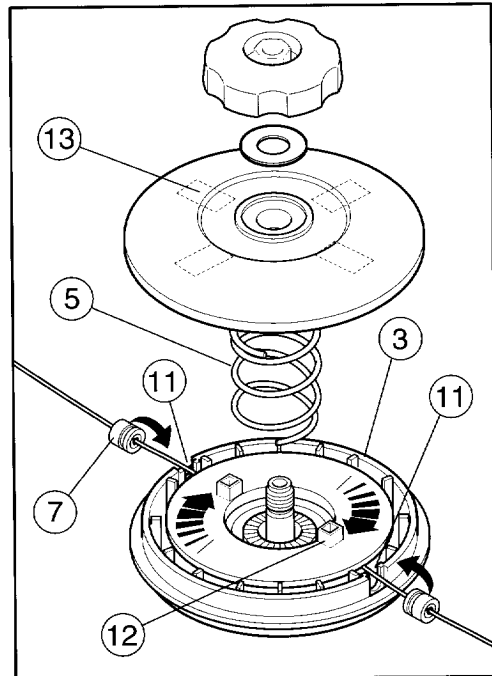
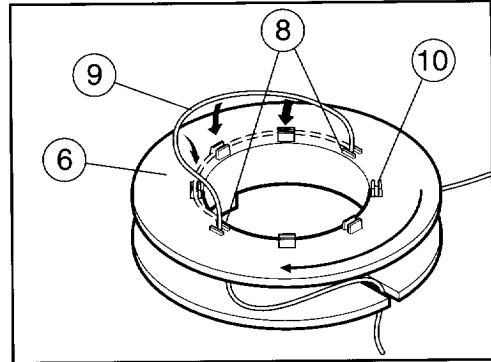
While holding the upper housing in the palm of your hand, wind the two strands completely onto the spool by turning it clockwise using the two drive fingers [12]. Continue winding until only the amount of line indicated by the index on the housing remains.

Replace the spring [5] and the lower housing making sure to engage the drive fingers [12] into the notches [13].

While keeping the spring compressed, replace the washer and tighten the knob.

▲ WARNING :

Ensure that the knob has been correctly tightened to prevent the line from unwinding during operation.



OPERATION

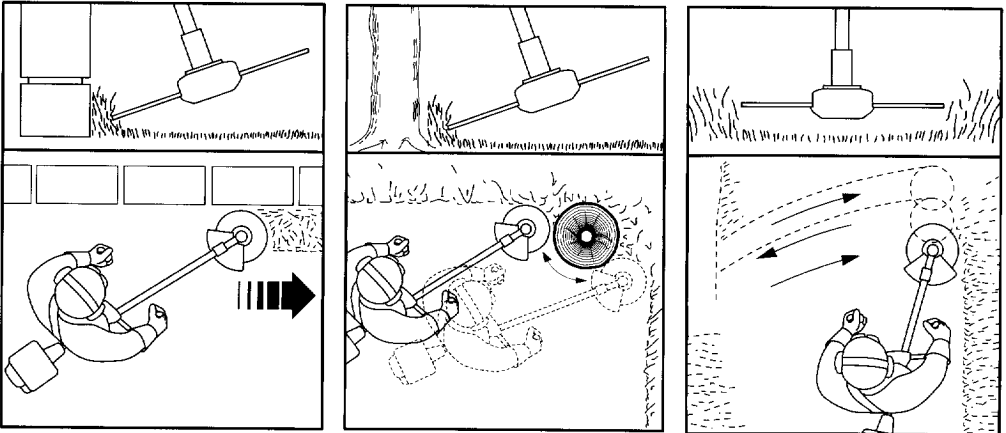
When the engine and the cutting head are restarted, extra line length will automatically be cut by the line cutter [3] located on the guard (see pag. 15).

Cutting:

The nylon line cuts the grass cleanly, without damaging tree bark and prevents the violent shock of a rigid tool against a hard surface.

It is, however, recommended that you do not stay too long in any one position on these objects, especially on fragile, immature plants and trees. Doing so will also prevent premature line wear. Proceed gradually when trimming, by tilting cutting head slightly.

When trimming, advance progressively while tilting the cutting head slightly. For larger surfaces, hold the tool horizontally and execute lateral swaying movements from the right to the left and vice versa.



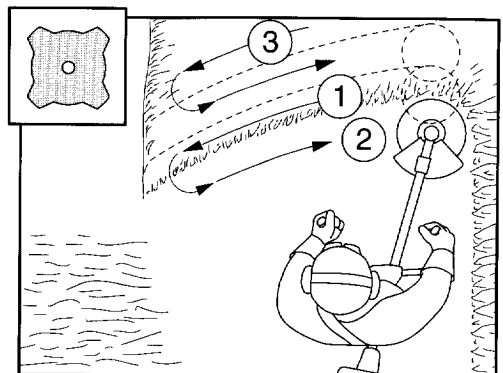
CAUTION: Do not lay tool's lower part onto the ground. Doing so may result in damage to the tool as well as to the lawn.

3. WITH A GRASS CUTTING DISK

Cutting disks are to be used only on type J and D models only.

▲ WARNING :

The four-tooth cutting disk is intended to clear vegetation such as tall weeds and small shrubs of up to 2 cm in diameter.



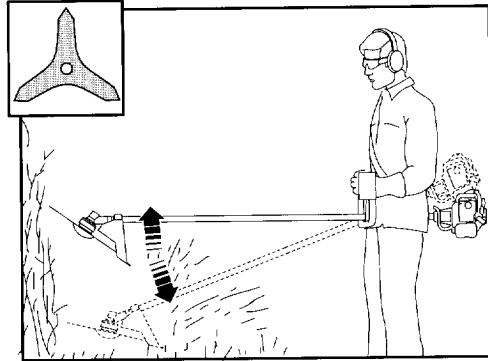
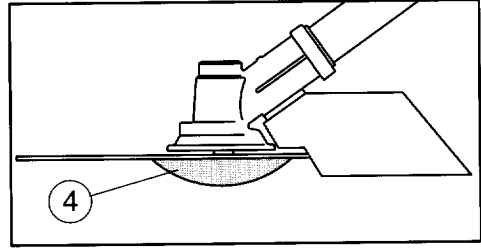
CAUTION: Do not use a blade larger than 255 mm in diameter.

a) Cutting:

Use the machine as you would a scythe, in swaying right to left movements, to clear vegetation [1], and then by bringing it back to the right, away from the vegetation [2] and so forth [3].

A stabilizer [4] is installed under the disk to guide the tool by lightly touching the ground. The three-tooth grass cutting disk is especially suitable for clearing dense and tangled weeds, as well as bushes like bramble or wild shrubs measuring up to 2 cm in diameter. In grass, handling is the same as with the four-tooth disk.

To trim bushes, engage the tool from above and hold it horizontal, moving in a slow downward motion in order to cut branches into small pieces.



▲ WARNING :

It is hazardous to use cutting disks on very hard trees and/or trees of large diameter. Cutting head kicks are extremely difficult to control and can gravely endanger operator safety and cause serious equipment damage.



SAFETY

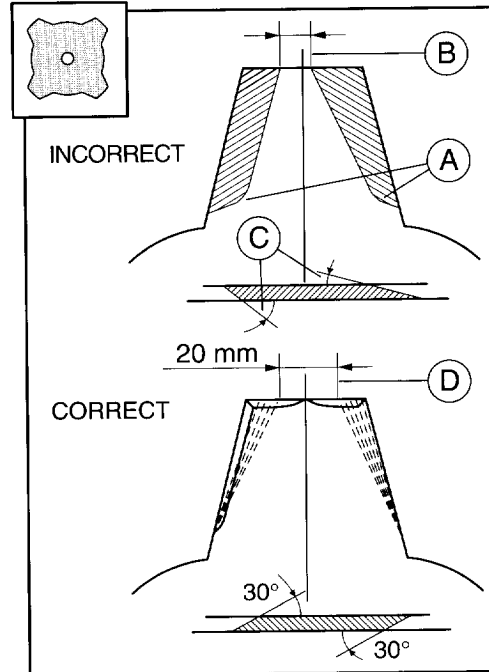
D2 D3 C11

b) Sharpening:

A sharp cutting disk is essential to obtain optimal results. A tool that is only slightly blunt may be sharpened with a file.

A grinding wheel may be necessary for significant wear.

CAUTION: In all cases, it is essential to make sure that the tool is always correctly balanced. If you do not have the required tools at your disposal or if you have a doubt as to the correct balance of the tool, contact your authorized HONDA dealer.



OPERATION

Remove the disk for sharpening and check that it is not cracked, out of true or bent. If such is the case, replace the disk with a new one. Either side of three-tooth and four-tooth blades can be used. When one side is worn, simply turn the disk over to use the cutting edges of the other side. Only the beveled edges of the teeth are to be sharpened. It is important to maintain a regular profile and to avoid incipient fractures. All of the teeth must be sharpened the same way.

CAUTION: Replace the blade as soon as the wear limit has been reached, as shown in the sketches below.

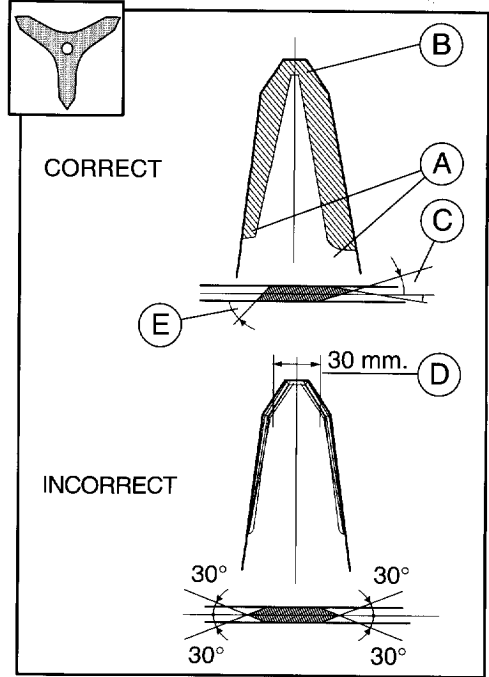
[A] Incipient fractures

[B] Beyond the limit and unequal tooth profile

[C] Angles Incorrect and unequal

[D] Sharpening limit

[E] Incorrect cutting profile



IMPORTANT:

HONDA brush clearing disks turn counterclockwise. It is thus strongly recommended to use the right-hand side of the blade to cut with. (The portion of the disk to use is indicated by sector [A]).

4. WITH A CIRCULAR SAW BLADE

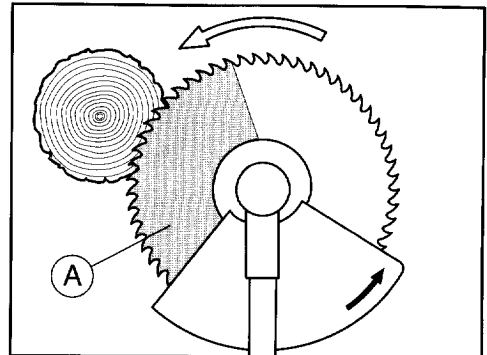
⚠ WARNING :

Circular saw blades are to be used only with type D brush cutters.

CAUTION: Use only saw blades measuring 255 mm in diameter. The circular saw blade is intended to be used for clearing shrubs, bushes and small trees whose trunk does not exceed 6 cm in diameter.

a) Cutting:

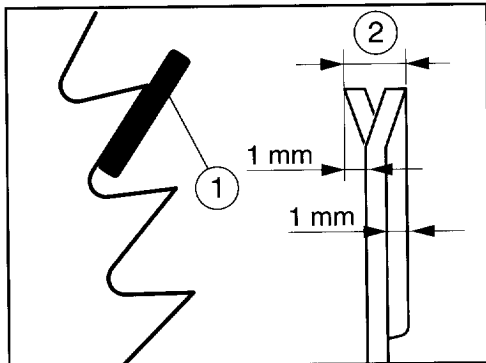
Some blade sectors must not be used as they will cause the tool to kick owing to the direction of rotation.



For best results, perform the cut in a swinging motion towards the branch or trunk to be cut. Do not proceed gradually as the engine speed could drop and make it stall.

⚠ WARNING :

Assess the height of objects to be cut and the area where they might fall. Check that falling branches will not injure persons or damage property. Make sure that the blade does not become stuck in the trunk as it falls. Always cut opposite to the fall.



A4 B1

b) Sharpening:

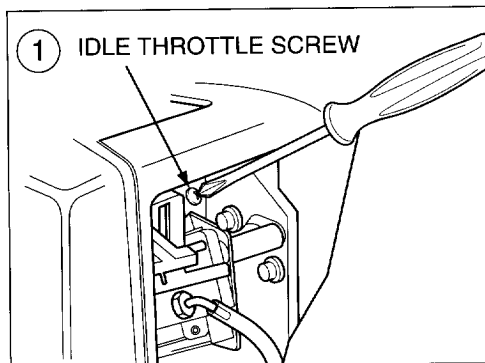
A circular saw blade can be sharpened with a file [1] if it is only slightly worn. It is very important to maintain correct tooth profile, cutting angles and pitch. If extensive sharpening is required, contact your authorized HONDA dealer who has the necessary specialized sharpening equipment. If necessary, he can check and adjust disk's pitch [2].

1. CARBURETOR ADJUSTMENT

Machines are individually set at the factory. However, further adjustment may be necessary if the machine is operated at high altitudes. In this case, only the idle will need to be adjusted by closing the idle screw [1] slightly.

PROCEDURE

Start the engine and let it warm up to normal operating temperature. Next, turn the idle screw [1] to the right or to the left to obtain the correct setting.



MAINTENANCE



B7

C1

Note:

refer to the table opposite for all adjustments.

Models	Idle
UMT 422S - 422D	3100 ± 200 Rpm
UMT 431J - 431D	3100 ± 200 Rpm

2. SPARK PLUG INSPECTION

Remove the cap and the spark plug with the supplied wrench.

Clean the electrodes with a wire brush to get rid of carbon deposits.

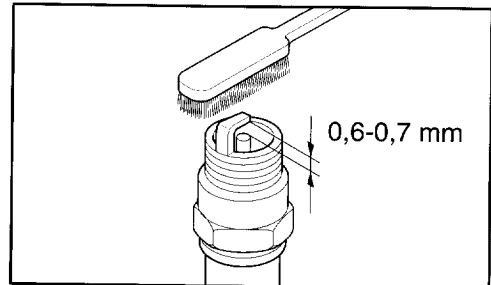
If the electrodes show signs of wear, replace the spark plug with a new one having the same characteristics.

Check the spark plug gap with feeler gauges. When adjustment is needed, carefully bend the side electrode.

Replace the spark plug and screw it in finger-tight onto its seat.

For new spark plugs, tighten an additional 1/2 turn with the spark plug wrench.

For the same spark plug, 1/8 to 1/4 of a turn should be enough.



CAUTION: A spark plug that is insufficiently tightened is likely to heat up and damage the engine. Overtightening or cross-threading a spark plug could damage the engine beyond repair.

3. AIR FILTER

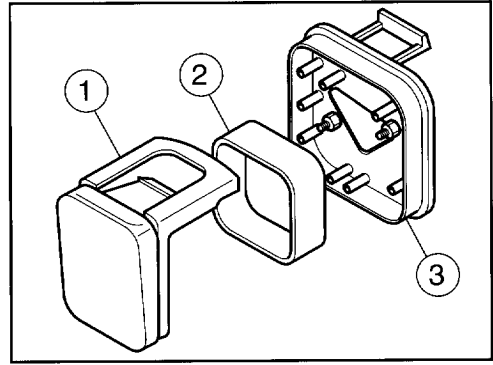
The foam air filter element must be cleaned regularly to prevent impurities from entering the engine and causing premature wear. A dirty air filter will reduce engine power and increase fuel consumption.

Open the air filter cover [1] and remove the filter [2] from the filter housing [3].

Clean the filter with hot soapy water or with a non-inflammable solvent, then let it dry thoroughly.

Soak the foam filter in new engine oil, then wring it to remove excess oil.

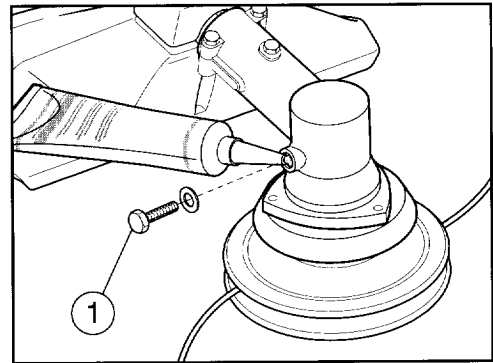
Put the foam filter and filter cover back in their original position.



4. TRANSMISSION HEAD LUBRICATION

Remove the bolt [1] from the transmission head. Insert the nozzle of the tube of special lithium grease into the hole and fill with grease while turning the cutting head. Continue until grease comes back through the bolt hole [1].

Replace the screw and tighten moderately.



MAINTENANCE

5. MAINTENANCE SCHEDULE

Element	Task	Interval*				
		Before each usage	Every 10 hours of operation	Every 25 hours of operation	Every 6 months or 50 hours	Every year or 100 hours
Engune cooling fins	Clean					
Tool and guard condition	Check					
Transmission head zone	Clean					
Transmission head	Grease (lithium grease)					
Throttle trigger operation	Check					
Stop button operation	Check					
Idle/Clutch	Check					
Air filter element	Check					
	Replace		(1)			
Air filter housing	Clean					
Zone around spark plug	Clean					
Spark plug	Check					
	Clean					
Zone around carburetor	Clean					
Cables and connection	Check					
Fuel system	Check				(2)	
Fuel filter	Check					
	Replace				(2)	
Spring and clutch pads	Check					
	Replace				(2)	
Carburetor	Clean				(2)	
	Adjust				(2)	
Engine oil	Check					
Engine oil	Replace					
Fuel tank	Clean					
Valve clearance	Adjust				(2)	
Nuts and bolts	Check / tighten					

* Interval: Maintenance to be performed at the intervals indicated in hours of operation or periods, whichever occurs first.


(1) Replace more frequently in dusty environments.

(2) These operations must be performed by an authorized HONDA dealer, unless the owner has the appropriate tools and technical know-how to carry out the task. Refer to the HONDA workshop manual.

TROUBLESHOOTING

Problem:

Check:

- *The engine does not start*
 - *Is the Start/Stop button set on the start position  ?*
 - *Is the spark plug cap disconnected?*
 - *Is there fuel in the gas tank or has condensation formed in the tank?*
 - *The engine is flooded (the spark plug is wet).*
 - *The spark plug is fouled, or the spark plug gap is incorrect .*

- *The engine does not reach its maximum speed:*
 - *Is the choke lever in the engaged position "close"?*
 - *Are the air filter and spark plug clean?*
 - *Has condensation formed in the fuel tank?*

- *The engine stalls at idle:*
 - *Is the fuel tank air vent clogged? (accumulation of impurities around the screw at the end of the tube)*
 - *Is the idle speed pilot screw set correctly?*

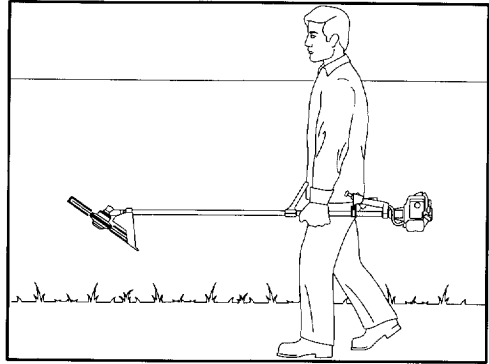
TRANSPORT AND STORAGE

1. TRANSPORT

⚠ WARNING :

When transporting your trimmer or brush cutter, you must systematically stop the engine and place the transport guard on the tool.

When carrying your machine, hold it by the transmission tube so it is balanced. If it is to be transported aboard a vehicle, ensure that it is well secured and positioned so that there is no risk of fuel leakage.



2. STORAGE

If the machine is not to be operated for more than two months time, it is advisable to take the following storage precautions:

Drain the fuel tank and run the engine to empty the carburetor.

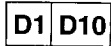
Remove the spark plug and pour a few drops of engine oil into the cylinder. Gently pull the recoil starter rope to distribute the oil onto the cylinder wall and piston, then replace the spark plug.

Clean the machine thoroughly, particularly plant residue that may have accumulated on the cutting head, in the engine cooling fins and under the various cowlings.

Brush a film of standard oil over the metal cutting disks to prevent corrosion.

Store the machine in its packaging in a dry cool place.

If the machine is to be stored vertically, place it with the engine at the bottom to ensure that it will not topple over.










Various accessories are delivered with the machine or are available as options, depending on the model.



A2

The table below summarizes the attachment possibilities of the various models.













	UMT422 S	UMT422 D	UMT431 J	UMT32 D
Manual feed head - Nylon 	✓	✓	✓	✓
Automatic feed head - Nylon 	●	●	●	●
3 - tooth blade 	✗	● Ø 255 mm max	● Ø 255 mm max	● Ø 255 mm max
4 - tooth blade 	✗	✓ Ø 255 mm max	✓ Ø 255 mm max	✓ Ø 255 mm max
8 - tooth blade 	✗	● Ø 255 mm max	● Ø 255 mm max	● Ø 255 mm max
80 - tooth saw blade 	✗	● Ø 255 mm max	✗	● Ø 255 mm max
Stabilizer with regulatory rotation 	✗	●	●	●

✗ = Prohibited

● = Optional

✓ = Supplied

TECHNICAL SPECIFICATIONS

		UMT422S	UMT431J	UMT422D	UMT431D
Type of engine		GX22	GX31	GX22	GX31
Displacement	Cm 3 (cc)	22	31	22	31
Bore / Course	mm	33X26	39X26	33X26	39X26
Power	KW	0,74	1,10	0,74	1,10
Max. RPM	rpm	8500	10000		
Idle speed	rpm	3100 ± 200			
Noise level (as per standard ISO7917)	dB (A)	 91	 90	 91	 90
Noise level (as per standard ISO10884)	dB (A)	 102	 102	 102	 102
Vibration level (as per standard ISO7916)	m/s ²	 6	 6	 4	 4
Vibration absorber		Single	Dual	Single	Dual
Lubricant	Mineral oil	SAE 10W30			
Oil reservoir capacity	cm 3	100			
Fuel	Gasoline	Unleaded Normal or Premium			
Fuel tank capacity	L	0,45	0,65	0,45	0,65
Ignition		ELECTRONIC			
Spark plug brand and type		NGK C5 HSB + CR5 HSB	Dense U16FS - UB + U16FSR - UB		
Carburetor		Membrane (WALBRO)			
Main pipe diameter	mm	24	26	24	26
Drive shaft	diameter in mm	7	8	7	8
	Shaft support bearings	5			
Centrifugal clutch diameter	mm	56	78	56	78
Transmission		Conic helical gearing			
Gear ratio		0,8	0,64	0,8	0,64
Cutting head rpm	rpm	6800	6400	8000	6400
Nylon line diameter	mm	3			
Empty weight (without cutting head)	Kg	6	7,1	7,2	7,9